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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/585,975	07/13/2006	Nobuaki Matsuoka	293163US26PCT	9037

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ALEXANDRIA, VA 22314

EXAMINER

TADESSE, YEWEBDAR T

ART UNIT	PAPER NUMBER
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1792

NOTIFICATION DATE	DELIVERY MODE
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09/03/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/585,975	Applicant(s) MATSUOKA ET AL.	
	Examiner YEWEBDAR T. TADESSE	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18-32 is/are pending in the application.
- 4a) Of the above claim(s) 29-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 18-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/06&8/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 18-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 18, lines 13 and 15-16; the phrase "said process blocks" and "the process blocks" lacks proper antecedent basis. For the purpose of examination the phrase "said plurality of process blocks" and "the plurality of process blocks" are assumed. In claim 18, line 27; the phrase "said process block" lacks proper antecedent basis. For the purpose of examination "each said plurality of process block" is assumed. In claim 18, line 30; the phrase "the units" lacks proper antecedent basis. For the purpose of examination the phrase "the coating, developing and heating units" is assumed.

In claim 22, line 2; the phrase "said process block" lacks proper antecedent basis. For the purpose of examination the phrase "said plurality of process blocks" is assumed.

In claim 24, lines 2 and 3; the phrase "said process block" lacks proper antecedent basis. For the purpose of examination the phrase "said plurality of process blocks" is assumed.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 18-28 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 6 of U.S. Patent No. 7,322,756. Although the conflicting claims are not identical, they are not patentably distinct from each other because Claims 1 and 6 of US’756 recite a carrier block, a first and second transfer mechanism, a plurality of process block control device and others .

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 18-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takekuma (US 6,377,329) in view of Okubo et al (US 6,851,872).

As to claims 18-26, Takekuma discloses (see Figs 4-5) a substrate processing apparatus comprising a carrier block (10) including a carrier placement portion (21) lots (cassettes C) containing a plurality of substrates, first transfer means (22); second transfer means (61) provided adjacent to the carrier block for transferring the substrate along a transfer path (see column 7, lines 34-43); a first delivery stage (62) capable of

Art Unit: 1792

delivering a substrate between the first and second transfer means (see column 7, 54-63 and Fig 9); a plurality of process blocks (100, 300) each comprising (see Figs 3, 5 and 17, column 9, lines 18-40) a heating unit (23), a developing unit, a third transferring means (30, 40) and a second delivery stage (EXT); a light exposure device (200); and an interface portion (51) located between the transfer path and the light exposure device. Takekuma further teaches a process block control portion and means for controlling the transfer means and the relevant process block (controller 90 and sensing means, see Fig 5 and column 6, line 66-column 7, line 9) controlling operations of the transfer means and the respective processing unit, capable of performing the claimed processing step (since a claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus shows all of the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). In any event, means for determining a process block (part of a controller) performing the claimed processing steps, where there is no substrate or where a final step for the last substrate within the relevant process block will be finished earliest based on the processing information of the substrates from the process block control portions before the substrate is delivered from the first delivery stage to the second transfer means is taught by Okuba et al (see Figs 6-7& 9-11, column 9, line 53 –column 11, line 53) for movement transfer apparatus controlled by a controller with predetermined instruction stored in the storage sections 92, 102 controlling the total processing time). It would have been obvious to one of ordinary skill in the art at the

Art Unit: 1792

time the invention was made to include a controller controlling the claimed steps in Takekuma to improve the throughput as taught by Okuba et al (see Abstract). As to liquid processing units, Takekuma's coating units (3) apply resist solution for forming a coating film, although the processing block is not comprised of coating unit and developing unit within the same block in Takekuma (either a group of coating units 3 or developing units 5 located in a processing block is taught in Takekuma). However, a processing block comprising both coating and developing units within the same processing block is known in the art; for instance –Okubo et al discloses a substrate processing apparatus wherein the processing blocks (G1, G2) are configured to accommodate both processing and developing units. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include both coating and developing units within the same processing block in Takekuma to facilitate the substrate treatment process.

With respect to claim 27, in Takekuma the plurality of process blocks are formed to have the same size in tow dimension (see Fig 3).

8. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takekuma (US 6,377,329) in view of Okubo et al (US 6,851,872) as applied to claim 18 above, and further in view of Yoshioka (US 6,168,667).

Takekuma lacks teaching a transfer block that extends along an arrangement of the plurality of process blocks and process block detachable from the transfer block. However, Yoshioka discloses (see Fig 1) a transfer block (31) that extends along an

Art Unit: 1792

arrangement of the plurality of process blocks (33). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include a transfer block that extends along an arrangement of the plurality of process blocks in Takekuma as desired, since the claimed arrangement of the transfer means is conventional in the art as shown by Yoshioka and it has also been held that rearranging parts of an invention only involves routine skill in the art. *In re Japikse*, 86 USPQ 70. As to detachable connecting the process block to the transfer block, again it involves routine skills in the art. It would also have been obvious to one of ordinary skill in the art to detachable connect the process block to the transfer block to facilitate maintenance and replacements of parts.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YEWEBDAR T. TADESSE whose telephone number is (571)272-1238. The examiner can normally be reached on Monday-Friday 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1792

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Yewebdar T Tadesse/
Primary Examiner, Art Unit 1792